

DEVAL L. PATRICK GOVERNOR TIMOTHY P. MURRAY LIEUTENANT GOVERNOR JUDYANN BIGBY, MD SECRETARY

JOHN AUERBACH COMMISSIONER

The Commonwealth of Massachusetts

Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

11/29/2011

LaKeshia Parker-Small Assistant District Attorney, Suffolk County

Dear ADA Parker-Small,

Enclosed is the information you requested in regards to Commonwealth vs. Included are copies of the following:

- 1. Curriculum Vitae for Annie Dookhan and Kate Corbett.
- 2. Drug Analysis Laboratory Receipt.
- 3. Control Cards with analytical results for samples #
- 4. Analysis sheets with custodial chemist's hand notations and test results.
- 5. GC/Mass Spectral analytical data for samples #

Annie Dookhan was the custodial chemist and performed the preliminary testing and net weight for this sample. Kate Corbett analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely

Annie Dookhan

Chemist

Drug Analysis Lab

Jamaica Plain, MA. 02130

(617) 983-6622

Curriculum Vitae

Annie Khan (Dookhan)

Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry.

University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

Experience:

2003 - present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- *Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- *Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.
- *Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- *Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- *Maintenance and repairs of all analytical instruments.
- *Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.
- *Oversee the Quality Control/Quality Assurance program for the Drug Lab.
- *Writing, revising and reviewing Standard Operating Procedures (SOPs) and Protocols.
- *Notary Public.
- *Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 - 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- *Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.
- *Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.
- *Writing, revising and reviewing Standard Operating Procedures (SOPs).
- *Trained and supervised new chemists and interns for the department.
- *Routine QC testing of products for the FDA.
- *Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- *Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- *Complete testing of chemicals for Vendor Validation Project for the FDA.
- *Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

Additional Training:

Dept. of Justice – Forensics Professionals. (numerous trainings)

GLP/GMP training with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS trainings with Agilent Technologies and Restek.

HPLC and LC/MS/MS trainings with Waters Cooperation.

FTIR training with Spectros.

TOC training with MBL and Sievers.

Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

Curriculum Vitae

Kate A. Corbett

Education

Bachelor of Science Degree, CHEMISTRY May 2003

MERRIMACK COLLEGE

Coursework included: Organic Chemistry, Inorganic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus

Employment

Chemist II State Laboratory Institute (March 2008-Present)

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance and trafficking substances to determine violation of the Massachusetts drug laws
- Responsible for the identification of pharmaceuticals to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation, microscopes and balances for forensic drug analysis

Chemist I State Laboratory Institute (2005-March 2008)

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation for the purpose of performing forensic drug analysis
- Successfully completed an eight week training course in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- Appointed an assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2005.

Research Associate (September 2003 – August 2005)

SENSOR TECHNOLOGIES, INC - Shrewsbury, MA

- Prepared chemistries used in making sensor beads
- > Generated and examined sensors employing fluorescence spectroscopy
- Performed protein, dye and sugar assays using UV/VIS spectrophotometry
- Carried out titrations on ricin using fluorescence correlation spectroscopy
- > Statistical analysis of experimental data

Intern (March 2003 - August 2003)

MASSACHUSETTS STATE POLICE CRIME LABORATORY - Sudbury, MA

- Assisted in the gathering of case files to fulfill the National Institute of Justice's No Suspect Backlog Reduction Grant
- Observed in the Evidence, Criminalistics, DNA, Drug, Trace, Toxicology, and Bomb/Arson Units

BOSION DE PARTME	N T
District/Unit B2. DCJ	
Name & Rank of Arresting Officer M	v.

DESCRIPTION OF ITEMS SUBMITTED

DEFENDANT'S NAME

120	CC #.					
DEPARTMENT	BOOK # 151 PAGE # 20					
PT						
	DESTRUCTION #	,	,			
. Des						
rresting Officer MV2PHY	Et Al	ID#868	39			
S NAME	ADDRESS	CITY	STATE			
		Rox	MA			
		Nex	Ms			
		Nox	Ma			
		LAB US	E ONLY			
N OF ITEMS SUBMITTED	GROSS QUANTITY	GROSS WEIGHT	ANALYSIS NUMBER			
CAROLL COLDINE	20 8/8	7,39a				
CARCK COLAINE	1 p/8	5,22g				
		A CONTRACTOR OF THE CONTRACTOR				
			The second secon			
			- Control of the Cont			
by ECU personnel only	111					
Submitting Officer Sylin	White	ID#/100	(4			
4 in		15-	タクーか			

No. Date Analyzed: | City: Boston D.C.U. Police Dept. Officer: P.O. SYBIL WHITE Def: Amount: Subst: SUB No. Cont: 20 Cont: pb

Date Rec'd: 10/21/2010

Gross Wt.:

7.39

No. Analyzed: 2

Net Weight: 2-17

Tests: \2 A50

Prelim: COcare

Date Analyzed:

City: Boston D.C.U. Police Dept. Officer: P.O. SYBIL WHITE

Def:

Amount: No. Cont:

Cont: pb

Date Rec'd: 10/21/2010

Gross Wt.:

5.22

No. Analyzed:

Net Weight: O. 13

Subst: SUB

Prelim: COcana (C)

Findings:

Folk_OIG_PRR_044110

DRUG POWDER ANALYSIS FORM

SAMPLE#	GENCY BOSYON ANALYST	A3.9
No. of samples tested:	Evidence Wt.	
PHYSICAL DESCRIPTION:	Gross Wt (20):_	3.3697
ORE while che	nu sustare Gross Wt (2+:	<u>9.3752</u>
PRELIMINARY TESTS		
Spot Tests	Microcrystalline Test	<u> </u>
Cobalt Thiocyanate (—) +	Gold Chloride +	
Marquis	TLTA (-) +	
Froehde's	OTHER TESTS	
Mecke's	-	

PRELIMINARY TEST RESULTS	GC/MS CONFIRMATORY 1	EST
RESULTS COcano	RESULTS Coccuie	
DATE 01-10-14	MS OPERATOR ICAC	
	DATE NO.2 and	

samples tested;

2

#	Gross Welght	Packet Weight	Net Welght	#	Gross Weight	Packet Weight	Net Welght
1	0000 P	e0		26			
2				27	000 000		
3	0.2166	0.1098	0.1068	28	· · · · · · · · · · · · · · · · · · ·		
4	0.1593	0.0489	0.1104	29			
5		20000000000000000000000000000000000000		30			
6				31			***************************************
7_		***************************************		32			***************************************
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11		***************************************	***************************************	36	***************************************		
12				37			707-307-407-117-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7-7
13	° .			38			
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21			,	46			
22	-			47			
23			T	48			
24				49		·	والمراكبة
25				50			

Calculations:

DRUG POWDER ANALYSIS FORM

SAMPLE# A	GENCY_	B0220	ANALY	rst <u>(3-57</u>
No. of samples tested:			Evidence V	VL
PHYSICAL DESCRIPTION:		sstance): <u>1.4404</u>):
~~	<i>∠ 6</i> 5		_	Wt: 0.1372
			•	
	,			
PRELIMINARY TESTS Spot Tests			Microcrystalline	<u>Tests</u>
Cobalt Thiocyanate (-) +			Gold Chloride +	
Marquis	ı		TLTA (-) +	
Froehde's			OTHER TES	TS
		<u> </u>		
PRELIMINARY TEST RESULTS		9	GC/MS CONFIRMAT	ORY TEST
RESULTS COcaup		F	RESULTS COCC	rè
DATE 1-10-11		OPI	MS ERATOR <u>√≪</u>	
			DATE 1-13	-1 i

Area Percent / Library Search Report

VKAC 11/29/11

Information from Data File:

File Name : J:\01_11_11\765131.D

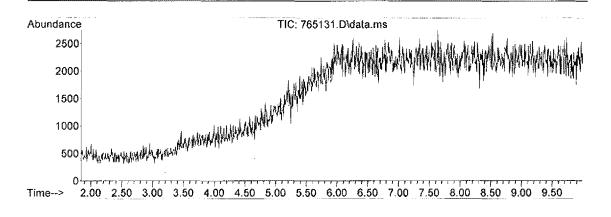
Operator : KAC

Date Acquired : 11 Jan 2011 15:50

Sample Name : BLANK

Submitted by

Vial Number : 1 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time

Area

Area %

Ratio %

NO INTEGRATED PEAKS

File Name : $J:\01_11_1\765132.D$

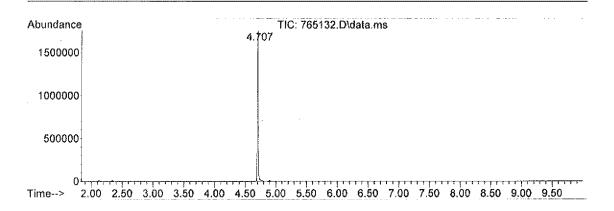
Operator : KAC

Date Acquired : 11 Jan 2011 16:03

Sample Name : COCAINE STD

Submitted by

Vial Number : 32 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.707	1853946	100.00	100.00

File Name : J:\01 11 11\765132.D

Operator : KAC

Date Acquired : 11 Jan 2011 16:03

Sample Name COCAINE STD

Submitted by

Vial Number 32 AcquisitionMeth: DRUGS.M : RTE Integrator

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

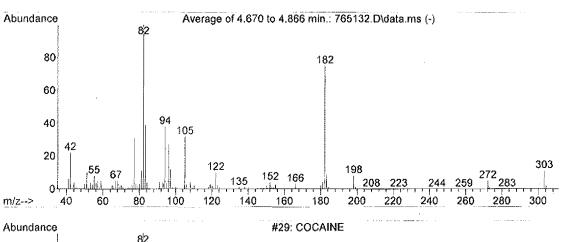
PK# RTLibrary/ID CAS# Qual

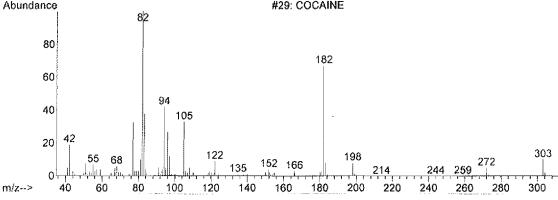
1 4.71 C:\Database\SLI.L

COCAINE

000050-36-2

99



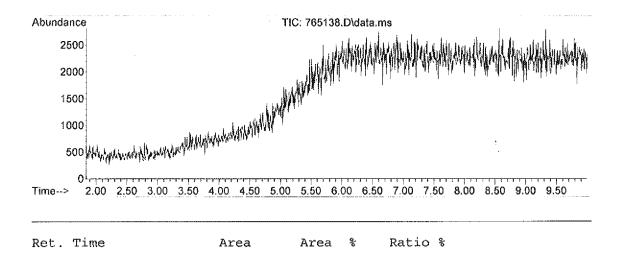


File Name : J:\01_11_11\765138.D

Operator : KAC

Date Acquired : 11 Jan 2011 17:18

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



NO INTEGRATED PEAKS

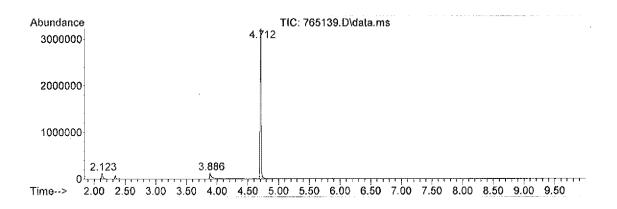
File Name : J:\01_11_11\765139.D

Operator : KAC

Date Acquired : 11 Jan 2011 17:31

Sample Name :

Submitted by : ASD
Vial Number : 39
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
2,123	191929 346068	4.23	4.80 8.66	
4.712	3994418	88.13	100.00	

File Name : J:\01_11_11\765139.D

Operator : KAC

Date Acquired 11 Jan 2011 17:31

Sample Name

Submitted by ASD Vial Number 39 AcquisitionMeth: DRUGS.M : RTE Integrator

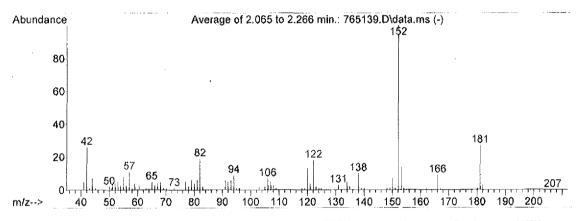
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

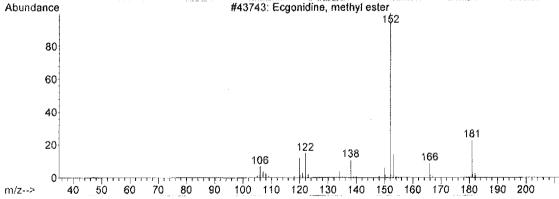
C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW TOX2.L

PK	# RT	Library/ID	CAS#	Qual
1	2.1	2 C:\Database\NIST05a.L	-	
		Ecgonidine, methyl ester	127379-24-2	98
		2-Carbomethoxy-8-methyl-8-az	zabicycl 043021-26-7	96
		2(1H)-Pyridinone, 4-hydroxy-	-6-methy 007135-82-2	38





File Name : J:\01_11_11\765139.D

Operator : KAC

Date Acquired 11 Jan 2011 17:31

Sample Name Submitted by

: ASD 39

Vial Number AcquisitionMeth: DRUGS.M Integrator : RTE

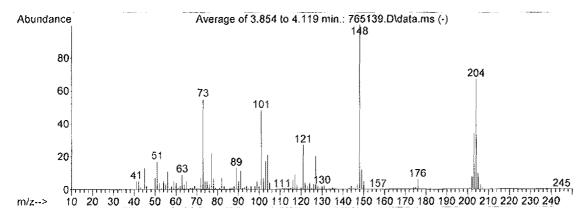
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

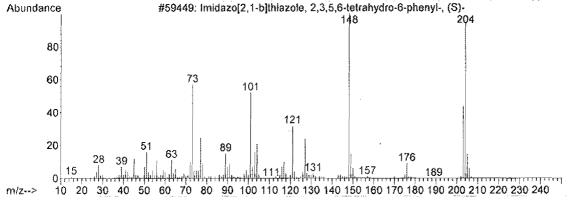
C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW TOX2.L

PK#	RT	Library/ID		CAS#	Qual
2	3.89	C:\Database\NIST05a.L Imidazo[2,1-b]thiazole,			98
		Imidazo[2,1-b]thiazole,			98
		<pre>Imidazo(2,1-b)thiazole,</pre>	2,3,5,6-tet	006649-23-6	98





File Name : J:\01 11 11\765139.D

Operator : KAC

Date Acquired : 11 Jan 2011 17:31

Sample Name :

Submitted by : ASD
Vial Number : 39
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L

e\SLI.L Minimum Quality: 80 e\NIST05a.L Minimum Quality: 80

99

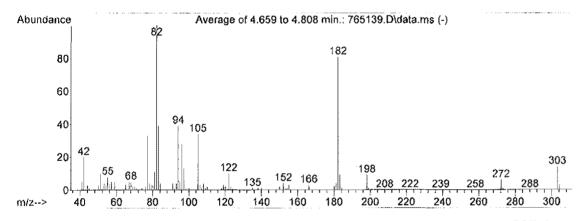
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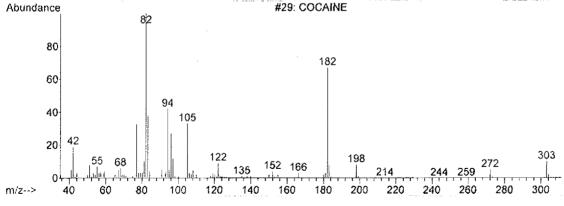
C:\Database\PMW_TOX2.L

PK# RT Library/ID CAS# Qual

3 4.71 C:\Database\SLI.L

COCAINE 000050-36-2





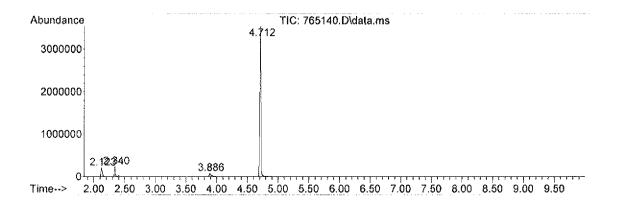
File Name : J:\01_11_11\765140.D

Operator : KAC

Date Acquired : 11 Jan 2011 17:44

Sample Name : Submitted by : ASD

Vial Number : 40 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
2.123	281327	5.54	6.48
2.340	225771	4.44	5.20
3.886	233942	4.61	5.39
4.712	4338945	85.41	100.00

File Name : J:\01 11 11\765140.D

Operator : KAC

Date Acquired : 11 Jan 2011 17:44

Sample Name :

Submitted by : ASD
Vial Number : 40
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:

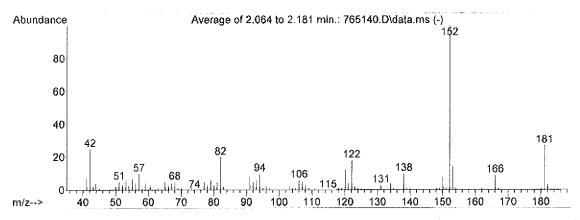
C:\Database\SLI.L

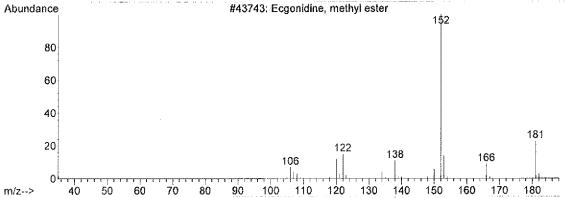
Minimum Quality: 80

C:\Database\NIST05a.L
C:\Database\PMW_TOX2.L

Minimum Quality: 80

PK#	RT	Library/ID	CAS#	Qual
 1	2,12	C:\Database\NIST05a.L		
		Ecgonidine, methyl ester	127379-24-2	98
		2-Carbomethoxy-8-methyl-8-azabicycl	043021-26-7	96
		1-Cyclohexyl-2-ethylpyrrolidine	051503-12-9	38





File Name : J:\01 11 11\765140.D

Operator : KAC

Date Acquired : 11 Jan 2011

Sample Name

Submitted by ASD Vial Number 40 AcquisitionMeth: DRUGS.M Integrator : RTE

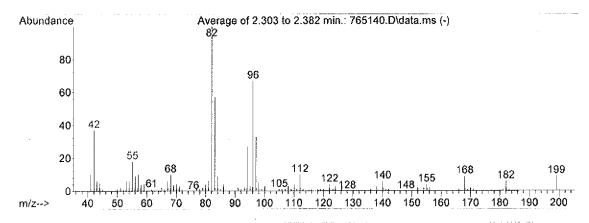
Search Libraries: C:\Database\SLI.L

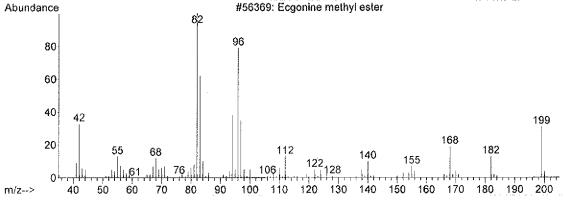
Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L C:\Database\PMW_TOX2.L

PK# CAS# RTLibrary/ID Oual

2.34 2 C:\Database\NIST05a.L 106293-60-1 98 Ecgonine methyl ester 106293-60-1 97 Ecgonine methyl ester Pseudoecgonine methyl ester 099189-88-5 97





File Name : J:\01 11 11\765140.D

: KAC Operator

Date Acquired 11 Jan 2011 17:44

Sample Name Submitted by

Vial Number 40 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

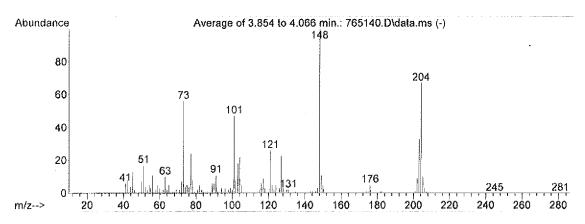
C:\Database\NIST05a.L

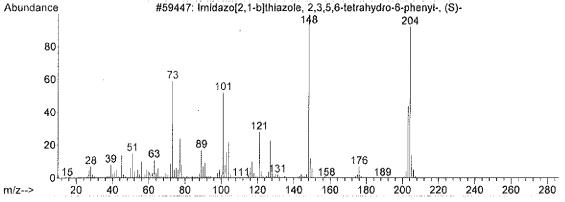
C:\Database\PMW TOX2.L

PK#	RT	Library/ID	CAS#	Qual

3 3.89 C:\Database\NIST05a.L

Imidazo[2,1-b]thiazole, 2,3,5,6-tet 014769-73-4 98 Imidazo[2,1-b]thiazole, 2,3,5,6-tet 006649-23-6 98 Imidazo[2,1-b] thiazole, 2,3,5,6-tet 014769-73-4 98





File Name : J:\01 11 11\765140.D

Operator : KAC

Date Acquired : 11 Jan 2011 17:44

Sample Name : Submitted by : .
Vial Number :

: ASD : 40 : DRUGS.M

AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

C:\Database\SLI.L Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 80

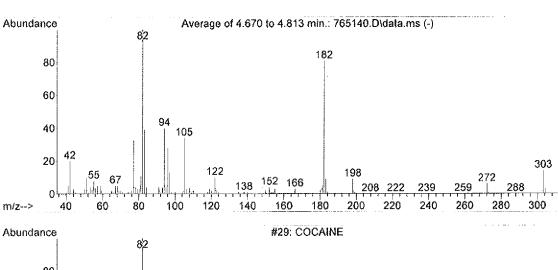
C:\Database\PMW TOX2.L

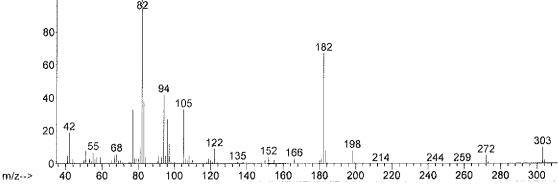
PK# RT Library/ID CAS# Qual

4 4.71 C:\Database\SLI.L

COCAINE

000050-36-2 99



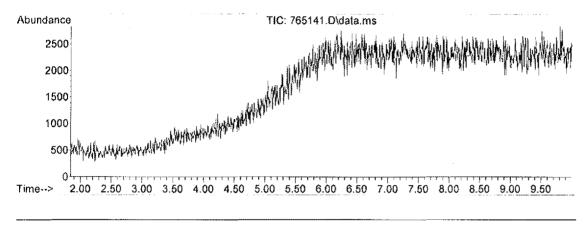


File Name : J:\01 11 11\765141.D

Operator : KAC

Date Acquired : 11 Jan 2011 17:56

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time

Area

Area %

Ratio %

NO INTEGRATED PEAKS

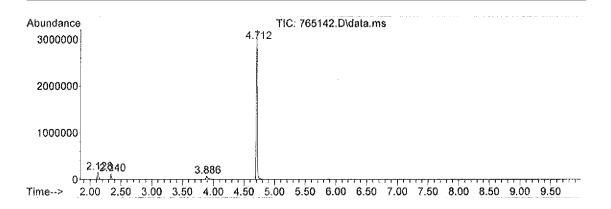
File Name : J:\01_11_11\765142.D

Operator : KAC

Date Acquired : 11 Jan 2011 18:09

Sample Name :

Submitted by : ASD
Vial Number : 42
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
2.128	228389	5,11	5.90	
2.340	126307	2.83	3.26	
3.886	242329	5.43	6.26	
4.712	3868988	86.63	100.00	

File Name : J:\01 11 11\765142.D

Operator : KAC

Date Acquired : 11 Jan 2011 18:09

Sample Name :

Submitted by : ASD
Vial Number : 42
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L

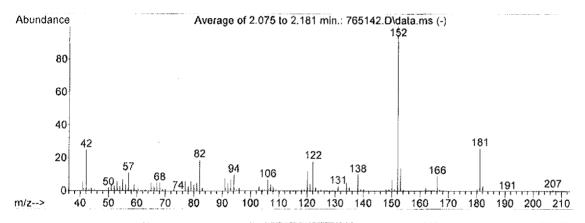
Minimum Quality: 80

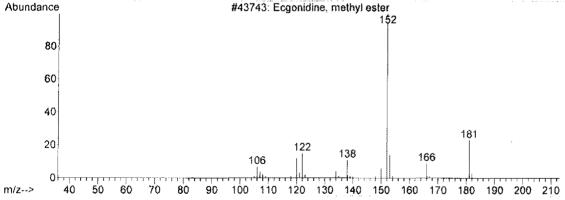
C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	2.13	C:\Database\NIST05a.L Ecgonidine, methyl ester 2-Carbomethoxy-8-methyl-8-azabicycl 3,5-Dimethoxyphenethylamine	127379-24-2 043021-26-7 003213-28-3	98 96 43





File Name : J:\01 11 11\765142.D

Operator : KAC

Date Acquired 11 Jan 2011 18:09

Sample Name

Submitted by Vial Number 42 AcquisitionMeth: DRUGS.M Integrator : RTE

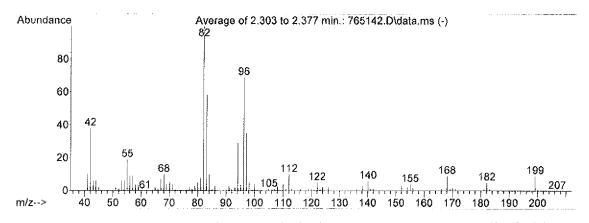
C:\Database\SLI.L Search Libraries:

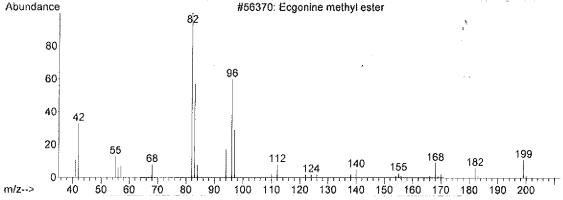
Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
2	2.34	C:\Database\NIST05a.L		
		Ecgonine methyl ester	106293-60-1	98
		Ecgonine methyl ester	106293-60-1	97
		Ecgonine methyl ester	106293-60-1	97





File Name : J:\01 11 11\765142.D

Operator : KAC

Date Acquired : 11 Jan 2011 18:09

Sample Name :

Submitted by : ASD
Vial Number : 42
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L

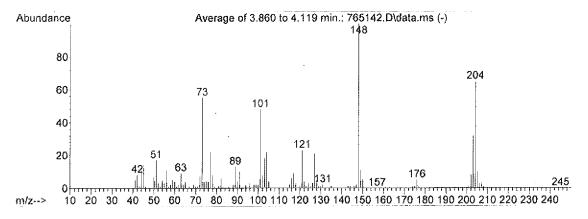
Minimum Quality: 80

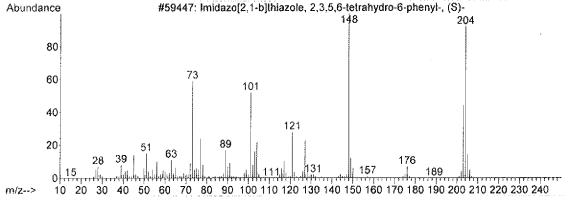
C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW_TOX2.L

PK#	RT	Library/ID		CAS#	Qual
3	3.89	C:\Database\NIST05a.L			
		<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	014769-73-4	98
		<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	006649-23-6	98
		<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	006649-23-6	98





File Name : J:\01 11 11\765142.D

Operator : KAC

Date Acquired 11 Jan 2011 18:09

Sample Name

Submitted by ASD Vial Number 42 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

99

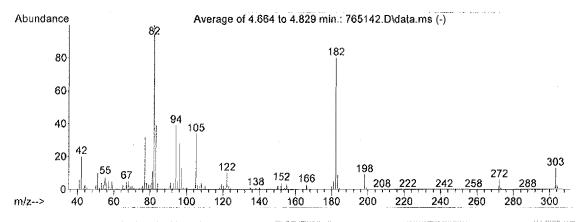
C:\Database\NIST05a.L

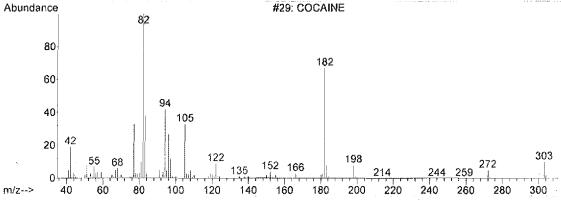
C:\Database\PMW TOX2.L

PK# RTLibrary/ID CAS# Qual

4.71 C:\Database\SLI.L

COCAINE 000050-36-2





File Name : J:\01 11 11\765144.D

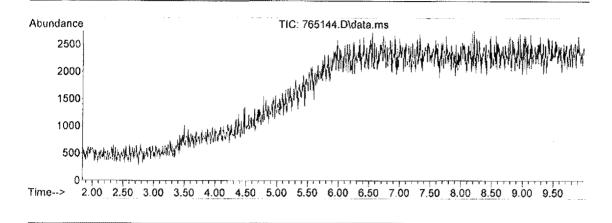
Operator : KAC

Date Acquired : 11 Jan 2011 18:34

Sample Name : BLANK

Submitted by

Vial Number : 1 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time

Area

Area %

Ratio %

NO INTEGRATED PEAKS

File Name : J:\01_11_11\765145.D

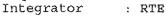
Operator : KAC

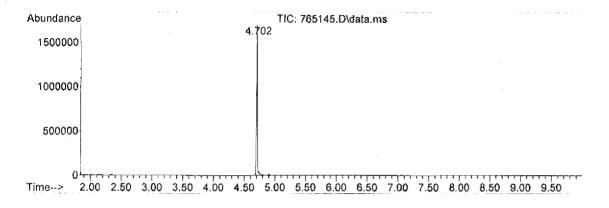
Date Acquired : 11 Jan 2011 18:46

Sample Name : COCAINE STD

Submitted by

Vial Number : 45 AcquisitionMeth: DRUGS.M





Ret. Time	Area	Area %	Ratio %
4.702	1770627	100.00	100.00

File Name : J:\01 11 11\765145.D

Operator : KAC

Date Acquired : 11 Jan 2011 18:46

Sample Name : COCAINE STD

Submitted by

Vial Number : 45 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80

C:\Database\NIST05a.L

Minimum Quality: 80

C:\Database\PMW_TOX2.L

PK# RT Library/ID CAS# Qual

1 4.70 C:\Database\SLI.L COCAINE 000050-36-2 99

